

### Remarks

The Applicants would like to thank the Examiner for participating in the interview with the Applicants' representative on December 7, 2010. The newly-incorporated features of Claim 15 were discussed, with the Examiner indicating that further consideration is necessary if such amendments are filed.

Claims 15-19 and 21-29 were previously pending. Independent Claims 15 and 26 have been amended, support for which may be found at least in paragraphs [0021]-[0025] and [0030], as well as in FIG. 2, of the originally-filed Specification. New Claims 31-32 have been added to claim subject matter previously unclaimed. Support for the new claims may be found in paragraphs [0015] and [0017] of the originally-filed Specification. No claims have been cancelled. Thus, Claims 15-19, 21-29, and 31-32 are pending.

Claims 15 and 26 stand rejected under 35 USC §112, first paragraph, as failing to comply with the written description requirement. The Rejection notes that the term "downstream interaction stream" is not supported by the originally-filed Specification. (*See* Pages 2-3 of the Office Action of June 23, 2010.) The Applicants have removed the term "downstream" from each of Claims 15 and 26. Therefore, withdrawal of the 35 USC §112, first paragraph, rejection is respectfully requested.

Claims 15-19 and 21-29 stand rejected under 35 USC §103(a) as being unpatentable over Kalva, in view of Liang, and further in view of Kim. The Applicants respectfully submit that Claims 15-19 and 21-29 are patentable over any theoretical combination of Kalva, Liang, and Kim for the reasons set forth below.

Independent Claim 15 recites a method for the management of interactions between a peripheral command device and a terminal that includes a multimedia application exploiting the

standard MPEG-4 to display a scene with MPEG-4 objects. The method according to Claim 15 includes “constructing a first digital sequence having the form of a BIFS node. The “digital sequence is based on an interaction stream of raw data from the peripheral command device to the terminal.” The BIFS node includes updates, which are based on the raw data, to modify the scene. The BIFS node also includes “a nature of action field and a parameter for action field to be applied to objects of said scene,” as well as a flag whose status either enables or prevents an action to be taken into account. The method of Claim 15 further includes “executing the first digital sequence at the terminal to reflect the one or more updates to modify the scene.”

Thus, the method of Claim 15 advantageously serves as a mapping between a peripheral device and a scene by receiving events from outside the scene (from a peripheral device, such as a keyboard or mouse) and triggering modifications into the scene. The events from outside the scene are represented in the “interaction stream of raw data.” Then, BIFS updates are constructed and executed at the terminal based on the data carried in the interaction stream to accordingly modify the scene at the terminal.

Kim is relied upon for disclosing that the first digital sequence is based on interaction stream of raw data from the peripheral command device. (See Page 5 of the Office Action of June 23, 2010.) This feature is admittedly absent from both Kalva and Liang.

Kim is directed to use of an upstream channel for processing user requests related to multimedia contents and scene formatting. However, according to Kim’s system and processing, the execution and construction of BIFS is performed on a remote server that is connected to the terminal to which the input device is connected. In fact, Kim describes that all scene modification steps for binary MPEG4 are performed by a remote server based upon upstream channel messaging from a user terminal. This is in sharp contrast to the method of

Claim 15 in which the processing (i.e., executing and constructing of BIFS) is performed on the entity (i.e., the terminal) to which the input device is connected. Specifically, Claim 15 recites constructing and executing a first digital sequence having the form of a BIFS node, where the first digital sequence is based on an interaction stream of raw data from the peripheral command device to the terminal. Moreover, Claim 15 recites that the first digital sequence is executed at the terminal.

Kalva, as previously described, also does not disclose a first digital sequence that is based on an interaction stream of raw data from the peripheral command device. Instead, Kalva discloses user interactions with the scene through use of existing sensor nodes.

Liang, similar to Kim's implementation, also requires use of a server. (*See* FIG. 1 of Liang.)

Thus, the Applicants respectfully submit that Claim 15 is patentable over the combination of Kalva, Liang, and Kim as the combination fails to disclose "the first digital sequence is based on an interaction stream of raw data from the peripheral command device to the terminal," and subsequent execution of the first digital sequence "at the terminal to reflect the one or more updates to modify the scene."

Claims 16-19, 21-25, and 31-32 are patentable at least due to their dependency on Claim 15, shown above to be patentable. Independent Claim 26 recites computer equipment that includes the features of the first digital sequence and the BIFS node recited in Claim 15. Accordingly, the Applicants respectfully submit that Claim 26 and its dependent Claims 27-29

are patentable for the reasons described above with respect to Claim 15.

In light of the foregoing, the Applicants respectfully submit that the entire Application is now in condition for allowance, which is respectfully requested.

Respectfully submitted,



T. Daniel Christenbury  
Reg. No. 31,750  
Attorney for Applicants

TDC/cs  
(215) 656-3381